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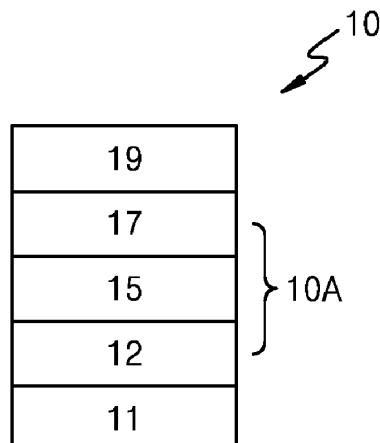
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(54) **ORGANIC LIGHT-EMITTING DEVICE**

(57) Provided is an organic light-emitting device including a host, a cooling dopant, and a sensitizer.

**FIG. 1**



**EP 3 739 645 A3**



## EUROPEAN SEARCH REPORT

 Application Number  
 EP 20 16 6748

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The present search report has been drawn up for all claims			
Place of search <b>The Hague</b>		Date of completion of the search <b>28 January 2021</b>	Examiner <b>Parashkov, Radoslav</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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Place of search <b>The Hague</b>		Date of completion of the search <b>28 January 2021</b>	Examiner <b>Parashkov, Radoslav</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)



Application Number

EP 20 16 6748

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION**  
**SHEET B**

Application Number

EP 20 16 6748

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1, 9, 12, 14(completely); 3-8(partially)

an organic light-emitting device comprising an emission layer, wherein the emission layer comprises a host, a cooling dopant, and a sensitizer, and wherein the sensitizer comprises platinum (Pt);

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2. claims: 2, 10, 11, 13, 15(completely); 3-8(partially)

an organic light-emitting device comprising an emission layer, wherein the emission layer comprises a host, a cooling dopant, and a sensitizer, and wherein the sensitizer comprises a thermally activated delayed fluorescence emitter, and the thermally activated delayed fluorescence emitter does not include metal;

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 20 16 6748

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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